# DSL/Cable Gateway
# NexIP IS050s

# User Manual

## Version
## 2.1

# DSL/Cable Gateway User Manual
# July. 2002

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# About This User Manual

Welcome to the Networking world of DSL/Cable Gateway!

This manual is intended as a basic introduction to your DSL/Cable Gateway. It provides enough information to make the Gateway operational in most common environments: connecting to the Internet, create your own private network and share an Internet connection.

We'll describe how to use your web browser to configure the Gateway and to perform some basic operations, e.g. upgrading the software, or viewing the connection log, a task which may be useful in ongoing operations. Finally, we'll tell you how to obtain information and help for subjects that are beyond the scope of this manual.

This manual consists of four chapters and two appendixes

**Chapter One**: Introduction, explains the features and capabilities of the DSL/Cable Gateway.

**Chapter Two**: Installing the DSL/Cable Gateway, gives the simple steps for you to follow to install the Gateway and configure your network connection.

**Chapter Three**: Configuring the DSL/Cable Gateway, explains how to login to user interface, describes the browser screen, and provides the needed steps to configure your DSL/Cable Gateway for specific applications. It provides easy-to-follow instructions for quick Internet access and provides guidelines to the most popular DSL/Cable Gateway configurations.

**Chapter Four**: Advanced Configuration, provides information on advanced configurations.

**Appendix A** Troubleshooting

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## Safety Warnings

The DSL/Cable Gateway is not intend to be serviced by the user. Do not open the case

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# Chapter 1 Introduction

## Overview of the DSL/Cable Gateway

The DSL/Cable Gateway is a small desktop gateway that sits between your local Ethernet network and a remote network (e.g., the Internet). The DSL/Cable Gateway contains an Ethernet EWAN port connecting to an external ADSL/Cable modem, and a four-port 10/100Mbps Ethernet switch for connecting to PCs on your local network. Data comes into the gateway from the local LAN and then is "routed" to the remote network, and vice versa. This Gateway provides many cost-effective functions and management benefits that provides ease of configuration and can be up and running in few minutes.

## DSL/Cable Gateway Applications

Main functions of the DSL/Cable Gateway:
-Share IP Address, provides Internet access to users with one ISP account
-To allow access to the servers from the public network,
-Eliminate the needs of installing software to connect to ISP
-Built in switch provides connectivity to 10/100 Mbps for LAN devices
-Host different services for remote users to access various services at their site using constant IP
-Allow Internal network to be fully exposed to the Internet for special applications (DMZ Host)
-Provides security features that prevents hacking from Internet

## Accessing the Internet

The most common use for the DSL/Cable Gateway is to provide Internet access, so that everyone on your LAN can surf the web and send/receive email or files. The DSL/Cable Gateway automatically acquires the necessary IP address when the connection to the Internet is established. You don't need to apply for and assign an IP address to each PC or workstation on your network.

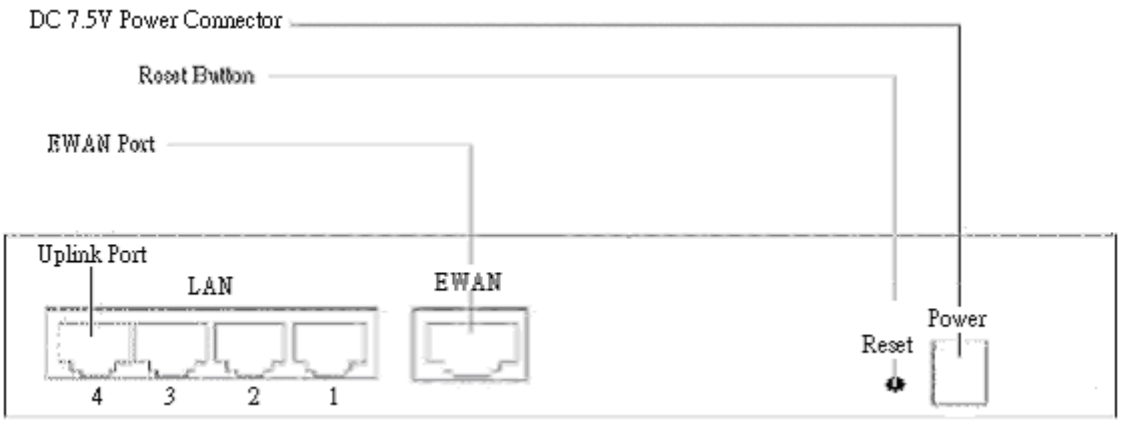
## Accessing Servers from the Public Network

If you want special servers to be accessible by remote users across the Internet (e.g. an e-mail server, an FTP server, or a web server), you can configure the DSL/Cable Gateway to *proxy* the service from its own address. This means that the remote user can address the Gateway as if it were the special server and the Gateway will redirect this connection to the appropriate computer on the network.

# A Physical Look at the DSL/Cable Gateway

The following illustration shows the rear panel of DSL/Cable Gateway:

(1) 4 RJ-45 10/100 Switch connectors for connecting to PCs and workstations or connecting external Ethernet hub, or switch with uplink switch on port 4
(2) 1 RJ-45 EWAN connector for connecting to Internet via ADSL/Cable modem
(3) 1 DC power connector for connecting through an AC power adapter (included as part of the product) to the wall power outlet
(4) Reset button to reset to factory configuration




## The Reset Button

This will restore factory defaults and clear all of the gateway's settings, including the IP addresses you entered.

# Chapter 2 Installing the DSL/Cable Gateway

## Installing the DSL/Cable Gateway

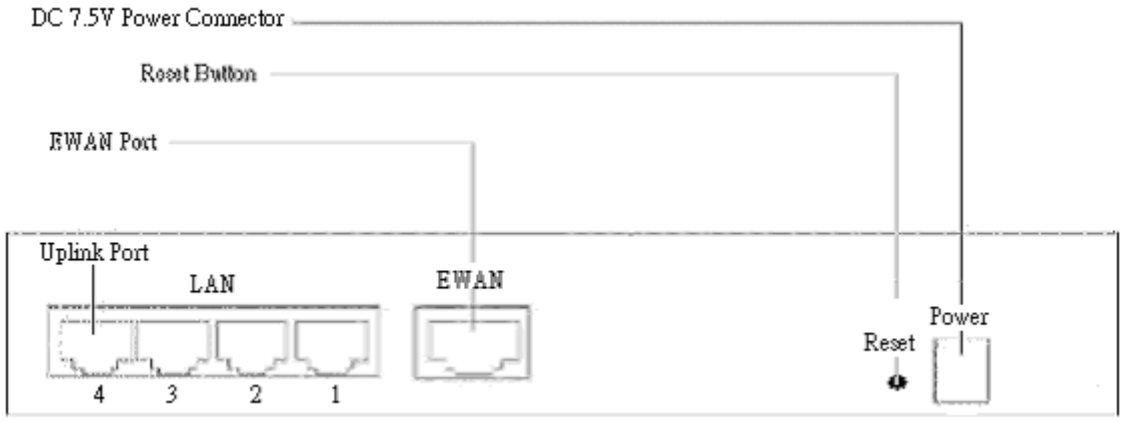
Follow these steps to install the DSL/Cable Gateway:

**Step 1** Connect ADSL/Cable modem to the Gateway's EWAN port using crossover CAT5 UTP LAN cable

**Step 2** Connect a PC/Workstation to one of the LAN ports of the gateway, such as port 1 or port 2 (using a standard patch straight cable).

**Step 3** Connect the power adapter to the gateway and an electrical outlet.

**Note:** Some Cable Modems use straight LAN cables, please check the front panel's LAN port LED, if it lights than it means cabling is correct.




DSL/Cable Gateway Connectors

## Setting Up a Windows PC for Configuring the DSL/Cable Gateway

This section describes how to configure PC on the LAN in order to communicate with the DSL/Cable Gateway.

The PC need to have an Ethernet interface card installed, and be connected to the DSL/Cable Gateway either directly (to its LAN ports) or indirectly through an external LAN hub or switch. It should also have TCP/IP installed, enabled, and configured to obtain an IP address automatically (i.e., through a DHCP server). If TCP/IP is not already installed, follow the steps below for its installation.

**Note:** Any TCP/IP capable workstation can communicate with the DSL/Cable Gateway. To configure workstations other than Windows 95/98/NT, please consult the manufacturer's documentation.

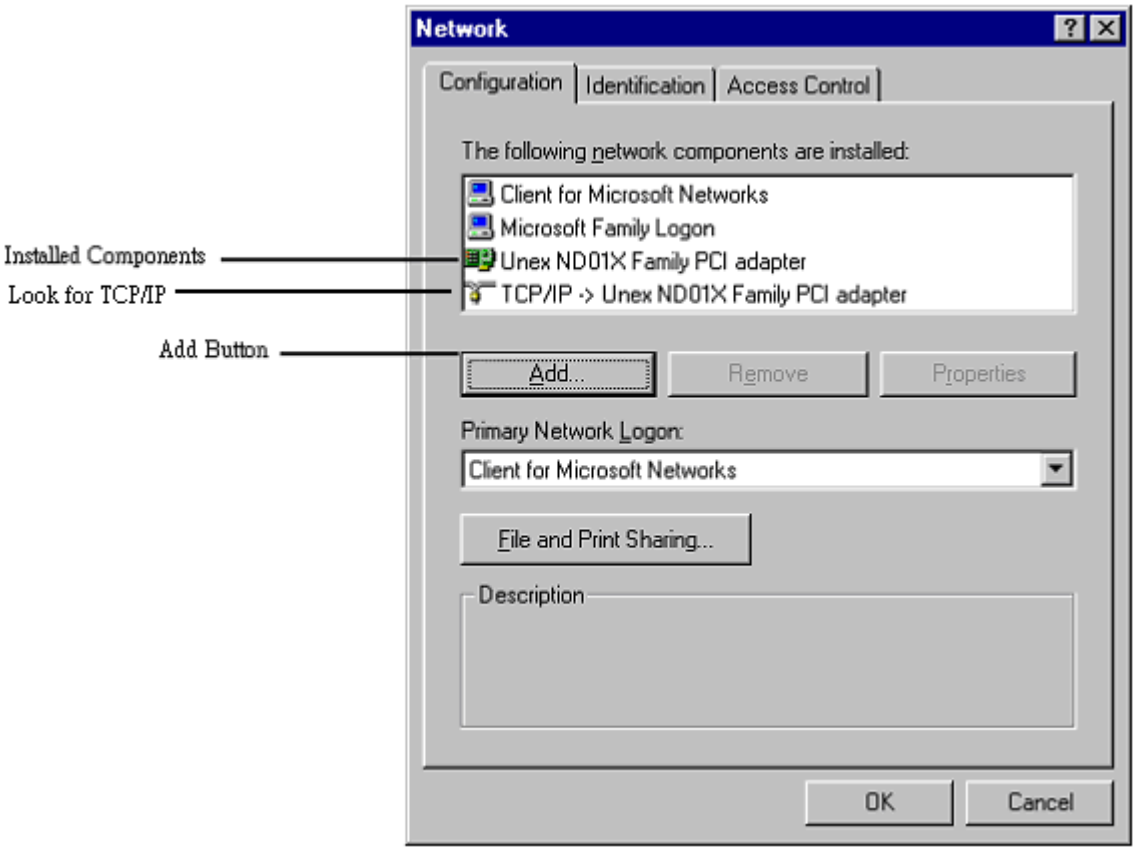
**Step 1** Connect your PC to one of the DSL/Cable Gateway Switch ports. If you connect to LAN

port 4, you should use a straight LAN cable and set the Uplink switch to the **Normal** position or use a crossover LAN cable and set the Uplink switch to **Uplink**.

**Step 2** From the Win95/98 **Start** button, select *Settings*, then *Control Panel*. The Win95/98 Control Panel displays.

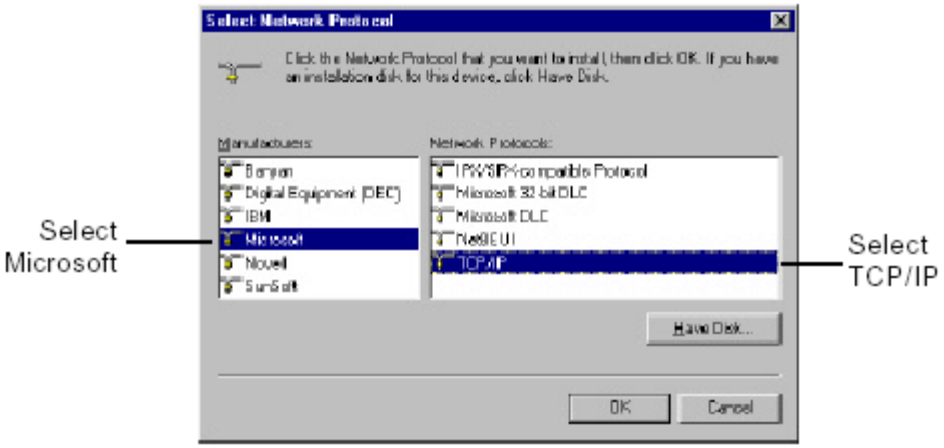
**Step 3** Double-click on the *Network* icon.

**Step 4** Check your list of Network Components in the Network window Configuration tab. If TCP/IP has already been installed, go to **Step 8**. Otherwise, select *Add* to install it now.




**Step 5** In the new *Network Component Type* window, select *Protocol*.

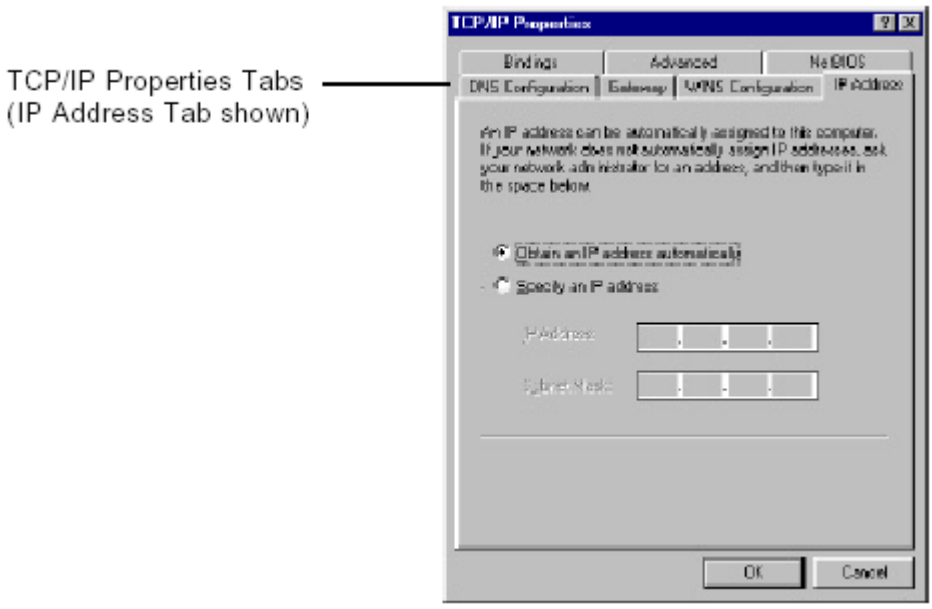
**Step 6** In the new *Select Network Protocol* window; select *Microsoft* in the Manufacturers area.




**Step 7** In the *Network Protocols* area of the same window, select *TCP/IP*, then click OK. You may need your Win95/98 CD to complete the installation. After TCP/IP installation is complete, go back to the *Network* window shown in **Step 4**.

**Step 8** Select *TCP/IP* in the list of Network Components.

**Step 9** Click on *Properties*, and check the settings in each of the TCP/IP Properties window:

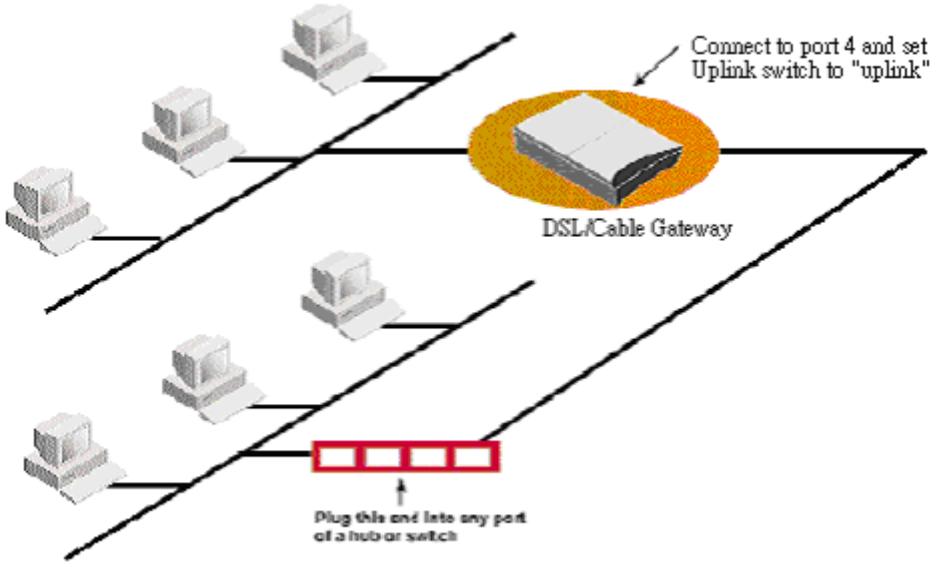

TCP/IP Properties Tabs
(IP Address Tab shown)
TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address
IP Address:
Subnet Mask:
OK
Cancel

-**Bindings Tab**: both *Client for Microsoft Networks* and *File and printer sharing for Microsoft Networks* should be selected.
-**Gateway Tab**: All fields should be blank
-**DNS Configuration Tab**: *Disable DNS* should be selected
-**IP Address Tab**: *Obtain IP address automatically* should be selected

**Step 10** When the DSL/Cable Gateway is connected to the LAN (and powered on), reboot the PC. After the PC is re-booted, you should be ready to configure the DSL/Cable Gateway. See Chapter3.

## Connecting more Devices to the DSL/Cable Gateway

The DSL/Cable Gateway provides four LAN ports to allow up to four PCs or Workstations to be connected to it directly. If you want to connect more devices, you can connect an external hub or switch to LAN port 4 using a straight LAN cable if the Uplink switch is set to the **Uplink** position, or using a cross-over LAN cable if the Uplink switch is set to the **Normal** position.




Connecting a Hub or Switch to the DSL/Cable Gateway

The uplink switch is shown in the following picture.

Uplink Switch

# 3 Configuring the DSL/Cable Gateway

Once you have completed the installation stage and have configured a PC properly as described in chapter two, you are ready to configure the DSL/Cable Gateway for actual applications.

## Internet Access in Five Minutes

You can configure your DSL/Cable Gateway quickly by the Setup Wizard at the very first time when logon to the gateway.

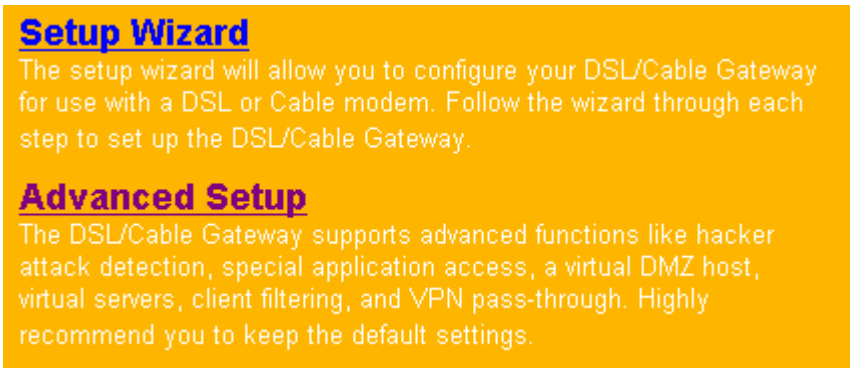
## Using Setup Wizard

The Wizard will guide you step by step to configure the gateway for your Internet Access by connecting DSL/Cable modem.

1. **Open your browser** and type **http://192.168.1.1** in the browser's address box; it is the default IP address of your Gateway.

2. **Logging In**
   After entering the default IP address as mentioned above, a password prompt screen will ask you to logon. If you are logging for the first time (by default there is no password, which is blank). The password is always displayed as a string of asterisks ("*"). Clicking the **LOGIN** button to begin gateway management session. If you have modified the password, you'll have to use the password that you've modified. You need to use the correct password before you can enter the user interface. No matter what password you use, each character will always be displayed in the logon prompt as a "*". If you forget the password, you'll have to reset the router back to its factory settings.

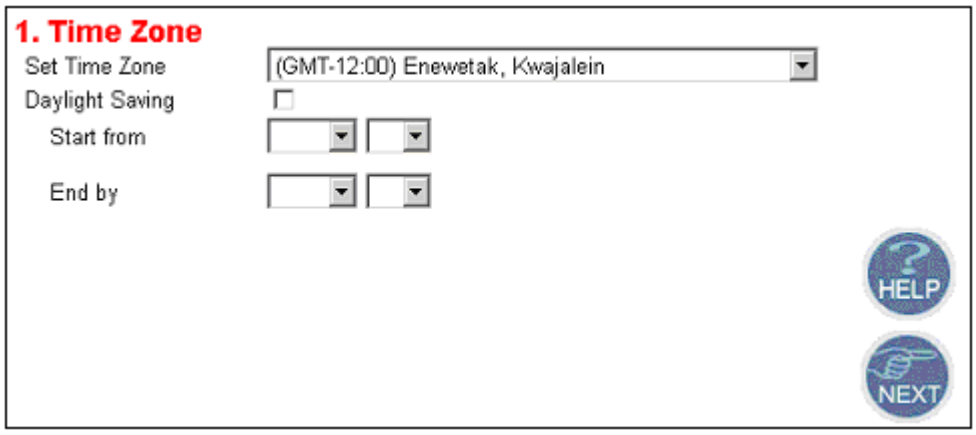
## Navigating the User Interface


Setup Wizard
The setup wizard will allow you to configure your DSL/Cable Gateway for use with a DSL or Cable modem. Follow the wizard through each step to set up the DSL/Cable Gateway.
Advanced Setup
The DSL/Cable Gateway supports advanced functions like hacker attack detection, special application access, a virtual DMZ host, virtual servers, client filtering, and VPN pass-through. Highly recommend you to keep the default settings.

The user interface includes two key menus **Setup Wizard**, and **Advanced Setup**. The setup wizard menu provides general information on the current settings and how to configure the Gateway. The advanced setup menu is used to configure the LAN and WAN interface, as well as other advanced functions such as resetting the router, restoring to factory default settings, hosting services and upgrading to newer version of firmware.

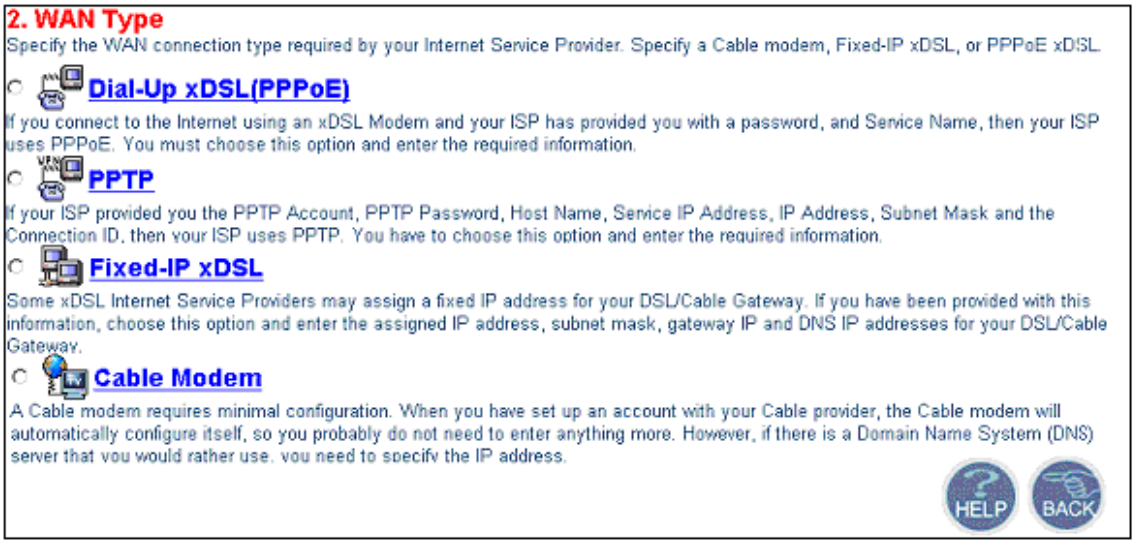
By clicking on the Setup Wizard link you will be directed to the following page.

## Time Zone



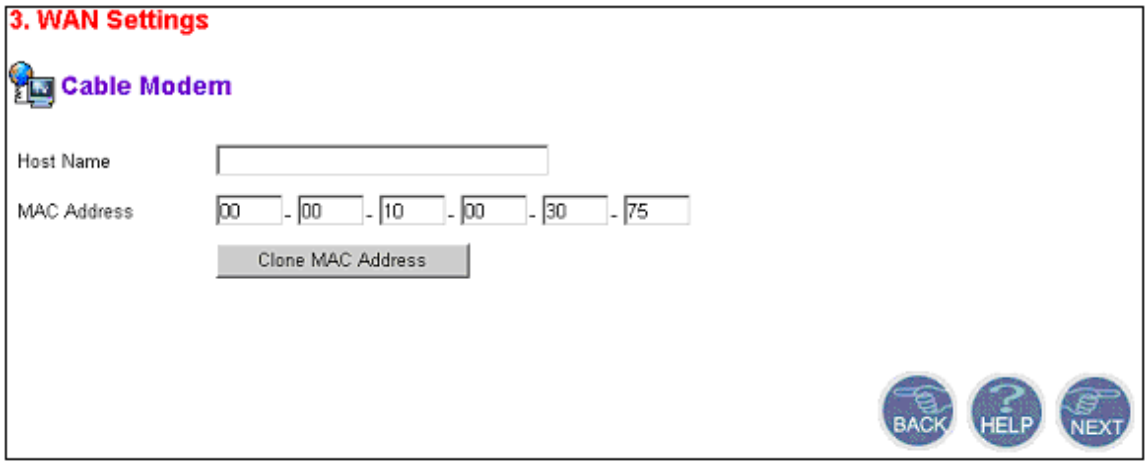

This time zone is used for log entries and client filtering. Click on the drop down box arrow and select the appropriate time zone for your location. You can enable the Daylight Savings time by checking the check box and set the start and end time.

## WAN Type


2. WAN Type
Specify the WAN connection type required by your Internet Service Provider. Specify a Cable modem, Fixed-IP xDSL, or PPPoE xDSL.
Dial-Up xDSL(PPPoE)
If you connect to the Internet using an xDSL Modem and your ISP has provided you with a password, and Service Name, then your ISP uses PPPoE. You must choose this option and enter the required information.
PPTP
If your ISP provided you the PPTP Account, PPTP Password, Host Name, Service IP Address, IP Address, Subnet Mask and the Connection ID, then your ISP uses PPTP. You have to choose this option and enter the required information.
Fixed-IP xDSL
Some xDSL Internet Service Providers may assign a fixed IP address for your DSL/Cable Gateway. If you have been provided with this information, choose this option and enter the assigned IP address, subnet mask, gateway IP and DNS IP addresses for your DSL/Cable Gateway.
Cable Modem
A Cable modem requires minimal configuration. When you have set up an account with your Cable provider, the Cable modem will automatically configure itself, so you probably do not need to enter anything more. However, if there is a Domain Name System (DNS) server that you would rather use, you need to specify the IP address.
HELP
BACK

There will be four options to select from. Please select the appropriate option that is used by your ISP.

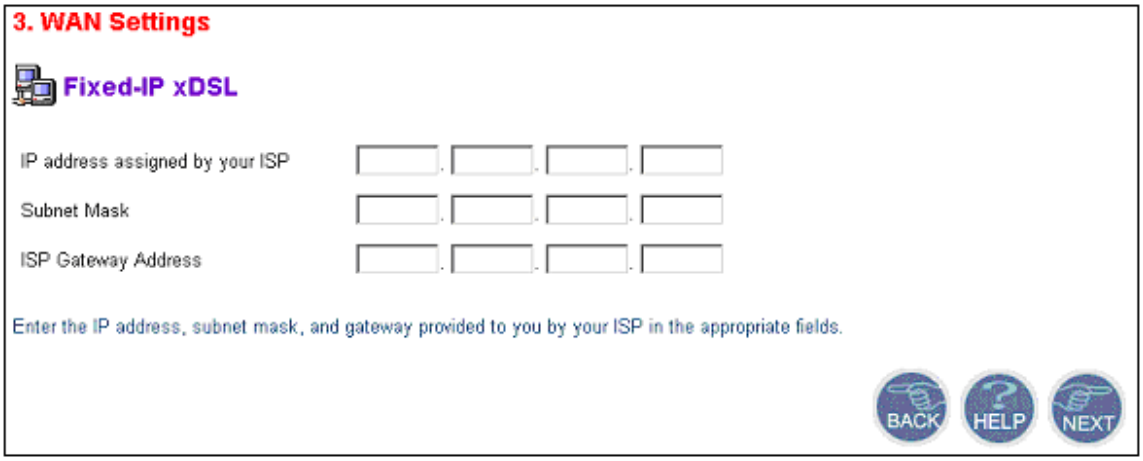
## Cable Modem




Set Cable modem host name, and MAC Address. If your ISP requires you to enter a specific host name or specific MAC address, please enter it in, if not leave it blank. The CLONE MAC Address button is used to copy the MAC address of your Ethernet adapter to the DSL/Cable Gateway EWAN.

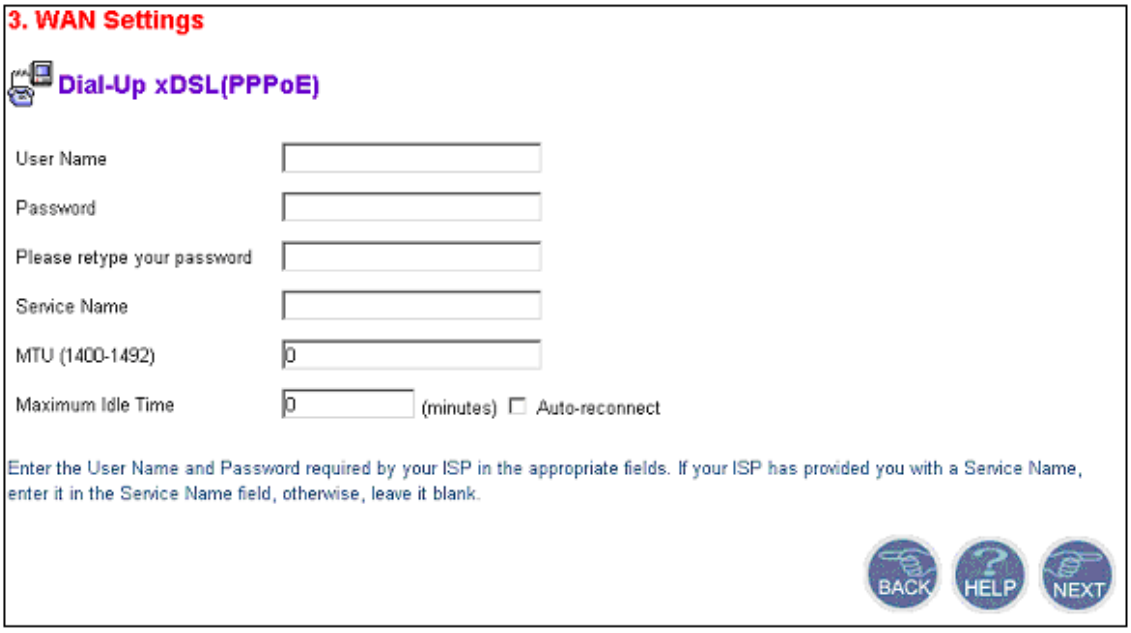
**Note:** Some ISPs require a specific MAC address in order to establish Internet connection.

## Fixed-IP xDSL


3. WAN Settings
Fixed-IP xDSL
IP address assigned by your ISP
Subnet Mask
ISP Gateway Address
Enter the IP address, subnet mask, and gateway provided to you by your ISP in the appropriate fields.
BACK
HELP
NEXT

Select this option to manually input the IP address that your ISP assigned to you. Enter the IP address, subnet mask, and gateway provided to you by your ISP in the text boxes.

## Dial-Up xDSL (PPPoE)




Select this option if your ISP uses PPPoE to connect to their services. Enter the User Name and Password required by your ISP in the appropriate fields. If some information is not provided to you, leave it blank. Enter in the Service Name if your ISP uses a Service Name for the PPPoE Connection, this is optional.

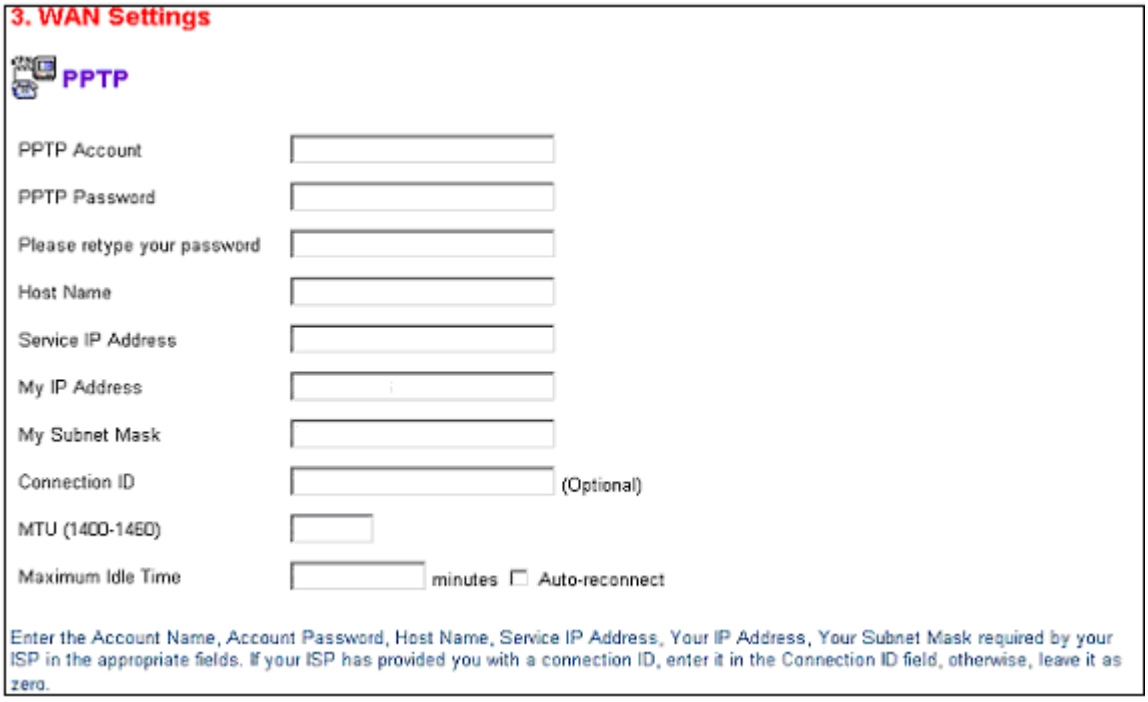
**MTU:** **(**Stands for **M**aximum **T**ransmission **U**nit) the largest frame size that can be transmitted over the network. Messages longer than the MTU must be divided into smaller frames.

**Maximum Idle Time:** This represents the number of seconds of inactivity over the connection. When the timer has expired, the Internet connection will be disconnected.

**Note:** When you set to 0, the connection will never be time-out.

**Auto Reconnect:** By checking the Auto-reconnect box, router will automatically connect to ISP after your system is restarted or once time has expired.

## PPTP

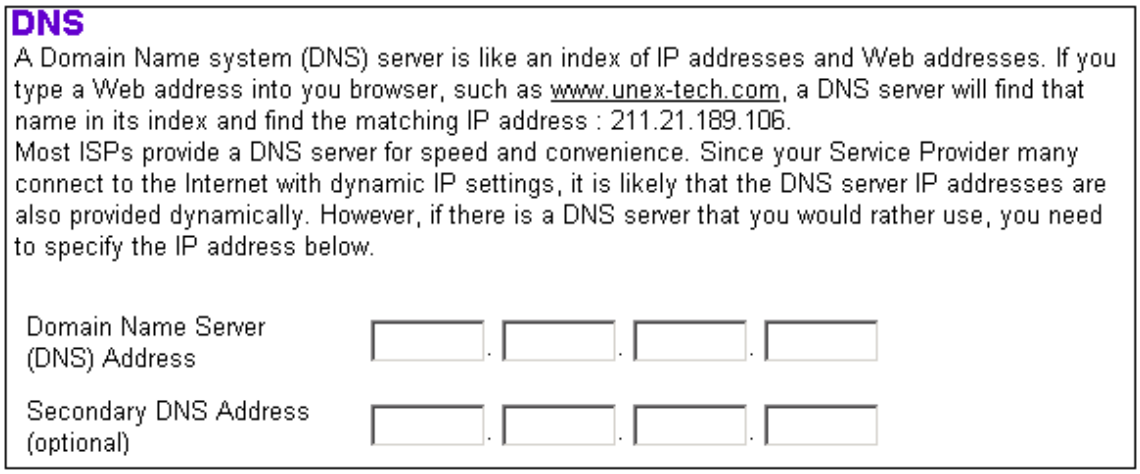

3. WAN Settings
PPTP
PPTP Account
PPTP Password
Please retype your password
Host Name
Service IP Address
My IP Address
My Subnet Mask
Connection ID
(Optional)
MTU (1400-1460)
Maximum Idle Time
minutes
Auto-reconnect
Enter the Account Name, Account Password, Host Name, Service IP Address, Your IP Address, Your Subnet Mask required by your ISP in the appropriate fields. If your ISP has provided you with a connection ID, enter it in the Connection ID field, otherwise, leave it as zero.

Choose this option if your ISP require the PPTP protocol in order for you to connect to the Internet. Enter the Account Name, Account Password, Host Name, Service IP Address, your IP address, and your subnet Mask required by your ISP in the appropriate fields. If some information is not provided to you, leave it blank.

**MTU:** **(**Stands for **M**aximum **T**ransmission **U**nit) the largest frame size that can be transmitted over the network. Messages longer than the MTU must be divided into smaller frames

**Maximum Idle Time:** This represents the number of seconds of inactivity over the connection. When the timer has expired, the Internet connection will be disconnected. When you enter 0, the connection will never be time-out. By checking the Auto-reconnect box, router will automatically connect to ISP once time has expired.

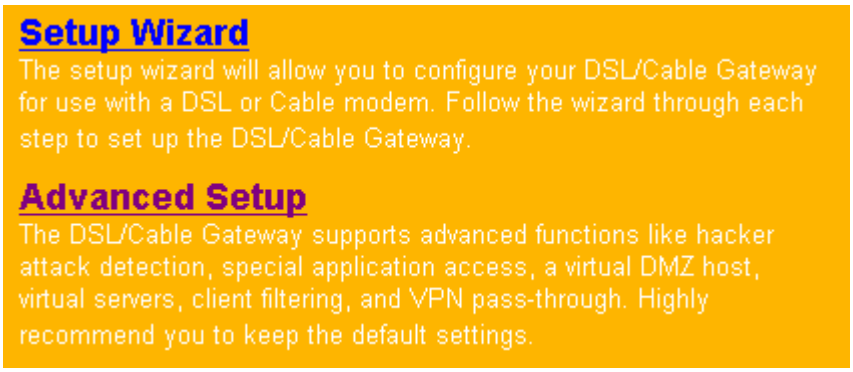
## DNS


DNS
A Domain Name system (DNS) server is like an index of IP addresses and Web addresses. If you type a Web address into you browser, such as www.unex-tech.com, a DNS server will find that name in its index and find the matching IP address : 211.21.189.106.
Most ISPs provide a DNS server for speed and convenience. Since your Service Provider many connect to the Internet with dynamic IP settings, it is likely that the DNS server IP addresses are also provided dynamically. However, if there is a DNS server that you would rather use, you need to specify the IP address below.
Domain Name Server (DNS) Address
Secondary DNS Address (optional)

A domain Name server (DNS) is like an index of names and Web Addresses. If you type a Web address into your browser, such as www.unex-tech.com, a DNS server will find that name in its index and find the matching IP address. Your ISP should provide the IP address for one or more domain name servers. Enter those addresses in the text box.

# Chapter 4 Advanced Configuration

## Advanced Setup


Setup Wizard
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Advanced Setup
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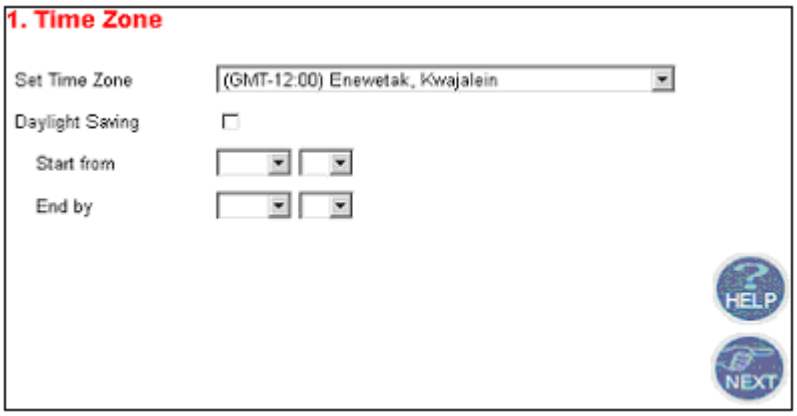
The advanced setup menu is used to configure the LAN and WAN interface, as well as other advanced functions such as resetting the router, restoring to factory default settings, hosting services and upgrading to newer version of firmware, client filtering and specials applications.

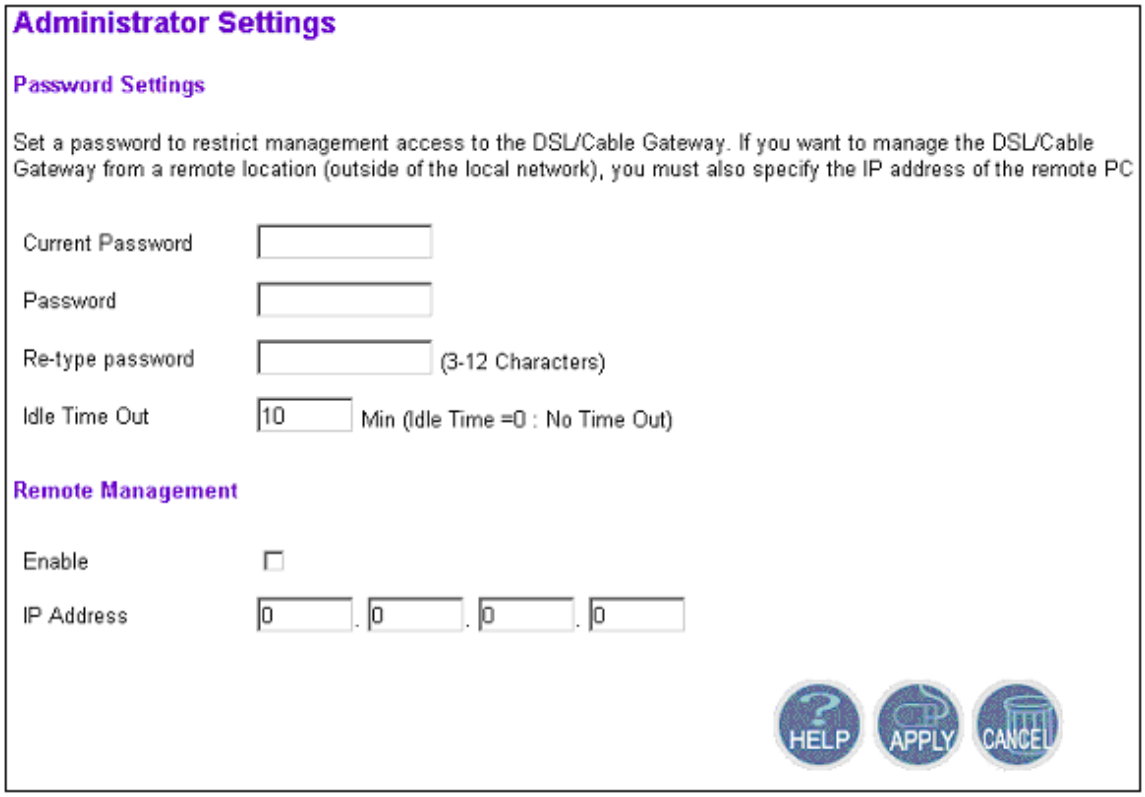
## System Time




The DSL/Cable Gateway maintains a real-time clock, which is automatically set to the local time of the management PC the first time a connection is made to the interface.

Since the DSL/Cable Gateway does not contain a backup battery for the real-time clock, the time will not be maintained across system resets or power cycles. Therefore, after a reset or power cycle, the clock will not be correct. To set the clock once again, simply log on to user interface. Note that the time zone and daylight savings time indicator are saved across power cycles.

## Administrator Settings




You can restrict management of the Gateway based on the password. You must enter a password to gain access to configuration options in the Gateway. There is no password by default; it is recommended that users assign a password as soon as possible for security reasons.

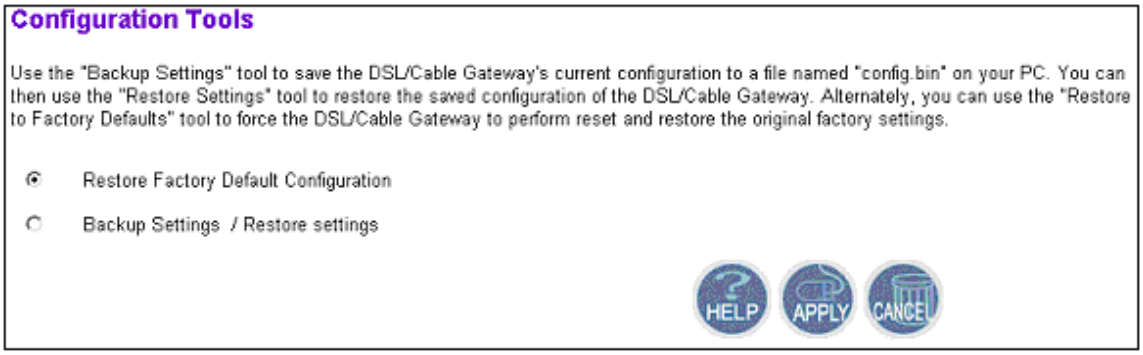
Time Out period is the amount of time of inactivity before the Gateway will automatically close the administrative session. When set to 0, it is disabled. You can also manage the Gateway from the Internet by adding the IP address of an administrator to this screen.

## Firmware Update

Firmware Update
Unex Technology Corporation may create new firmware for your DSL/Cable Gateway to improve functionality and performance.
Click here to check for an upgrade on Unex's website.
Enter the path and name of the upgrade file then click the APPLY button below. You will be prompted to confirm the upgrade.
Current Firmware Version: V 1.00.0100
Firmware Date: 2002.08.12
Browse...
APPLY

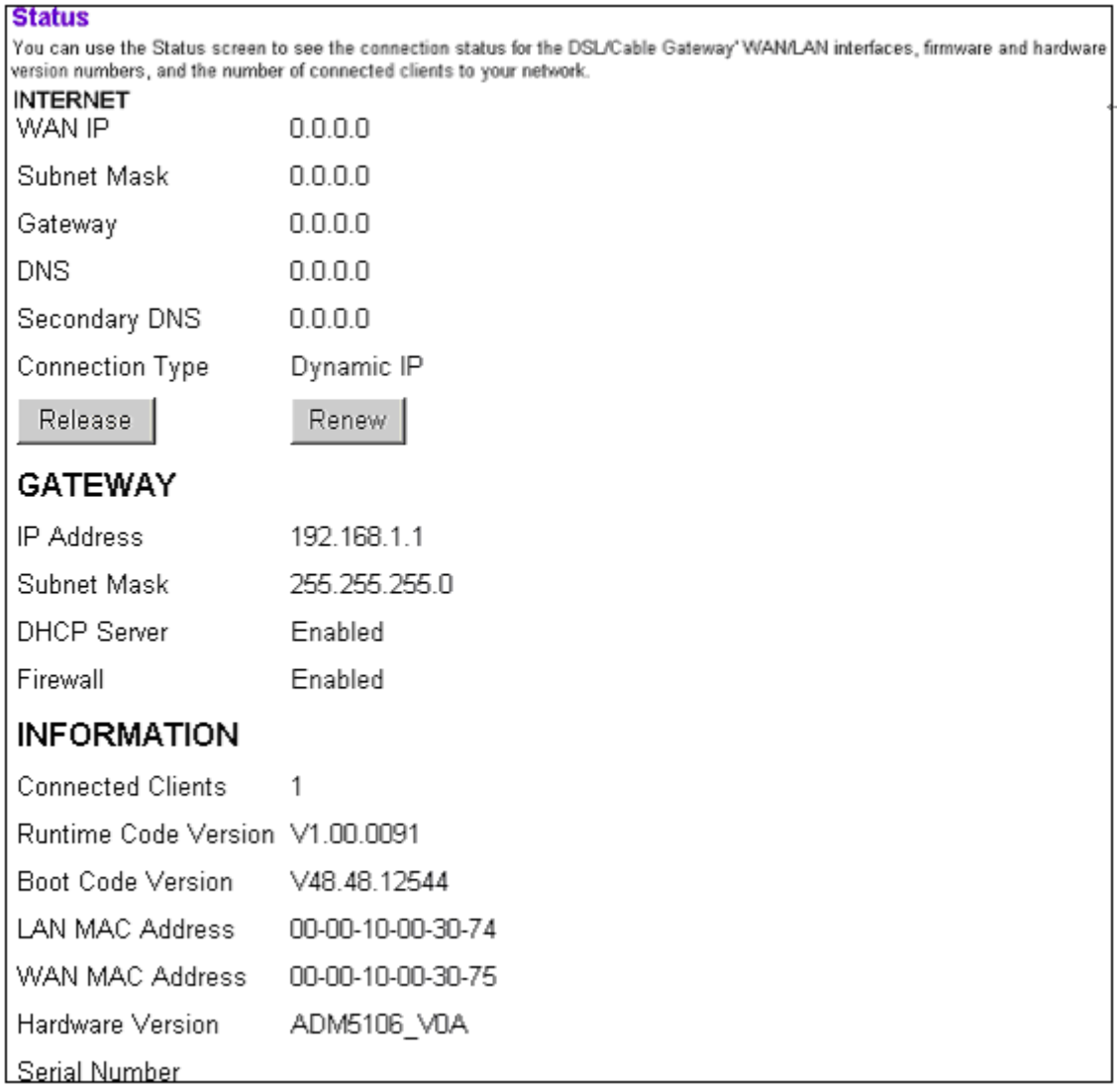
You can upgrade the firmware (the software that controls the Gateway's operations). Normally, this is done when you discover a problem, which is resolved in a different version of firmware that contains new features that you need. After a message appears telling you that the operation is completed, you need to reset the system so that the new firmware will take affect.

## Configuration Tools


Configuration Tools
Use the "Backup Settings" tool to save the DSL/Cable Gateway's current configuration to a file named "config.bin" on your PC. You can then use the "Restore Settings" tool to restore the saved configuration of the DSL/Cable Gateway. Alternately, you can use the "Restore to Factory Defaults" tool to force the DSL/Cable Gateway to perform reset and restore the original factory settings.
Restore Factory Default Configuration
Backup Settings / Restore settings
HELP
APPLY
CANCEL

Users can use this feature to save gateway's current configuration and turn it into a file. After saving this file users can then use the Restore settings to restore to previous settings. You can also use the restore to factory defaults tool to force the gateway to perform resets and restore to original factory settings.

## Status




The status screen is used to see the connection status of the Gateway; it contains all of the following information:

### Internet:

**WAN IP:** It indicates the WAN IP address of your DSL/Cable Gateway
**Subnet mask:** The subnet mask of the WAN IP address
**Gateway:** The gateway IP address of your ISP
**DNS:** DNS provided by your ISP
**Secondary DNS:** Some ISP will provide you with a secondary DNS server for backup purpose
**Connection Type:** Type of connection use to connect to ISP

### Gateway:

**IP Address:** Gateway's IP address, users use this address to log into the gateway
**Subnet Mask:** The subnet mask of the LAN IP address
**DHCP Server:** Indicates if router's DHCP server is on or off
**Firewall:** Indicates if Firewall function is on or off

### Information:

**Connected Clients:** Number of clients connected to this Gateway
**Runtime Code Version:** Firmware's Version
**Boot Code Version:** Code used to boot the router
**LAN MAC address:** The MAC address of your Gateway's LAN port
**WAN Mac address:** The MAC address of your Gateway's EWAN port
**Hardware Version:** Chipset used in the Gateway
**Serial Number:**

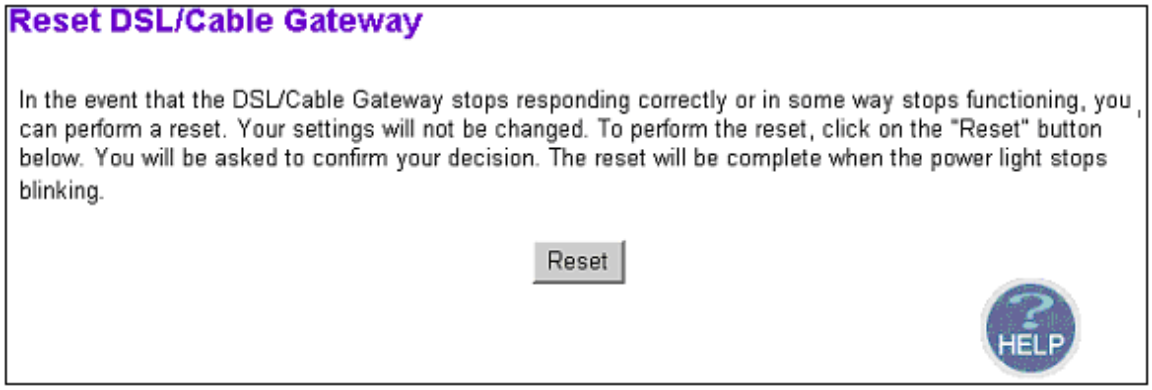
## Security Log

Example :

| Date | Time | Event Type | Packet Type | Source IP/Port | Destination IP/Port |
|---|---|---|---|---|---|
| 1970/01/01 | 00:02:50 | ** UDP Port LoopBack ** | <IP/UDP> | 10.1.16.36:1090->> | 10.1.16.4:88 |
| 1970/01/01 | 00:02:50 | ** Snork ** | <IP/UDP> | 10.1.16.36:1090->> | 10.1.16.4:88 |
| 1970/01/01 | 00:02:50 | ** Smurf ** | <IP/ICMP> | 10.1.16.36:1090->> | 10.1.16.4:88 |
| 1970/01/01 | 00:02:50 | ** TCP Null Scan ** | <IP/TCP> | 10.1.16.36:1090->> | 10.1.16.4:88 |
| 1970/01/01 | 00:02:50 | ** TCP SYN Flooding ** | <IP/TCP> | 10.1.16.36:1090->> | 10.1.16.4:88 |
| 1970/01/01 | 00:02:50 | ** IP Spoofing ** | <IP/TCP> | 10.1.16.36:1090->> | 10.1.16.4:88 |
| 1970/01/01 | 00:02:50 | ** Ping of Death ** | <IP/ICMP> | 10.1.16.36:1090->> | 10.1.16.4:88 |
| 1970/01/01 | 00:02:50 | ** IP with Zero Length ** | <IP/TCP> | 10.1.16.36:1090->> | 10.1.16.4:88 |
| 1970/01/01 | 00:02:50 | ** Unauthorized HTTP Access ** | <IP/TCP> | 10.1.16.36:1090->> | 10.1.16.4:88 |

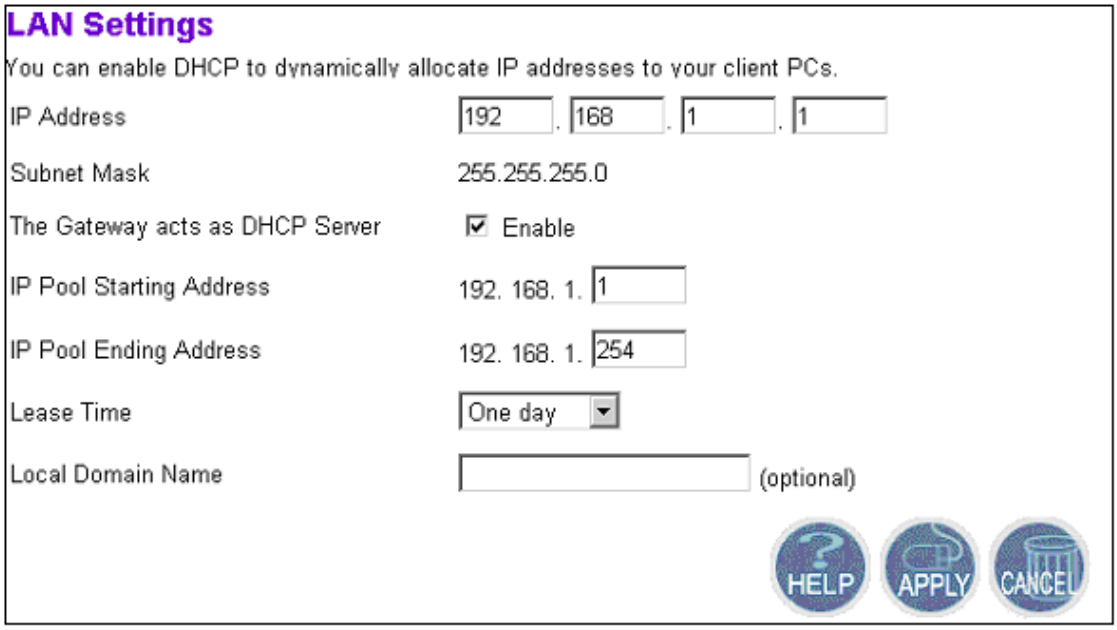
View any illegal attempts to access your network

## Reset System


Reset DSL/Cable Gateway
In the event that the DSL/Cable Gateway stops responding correctly or in some way stops functioning, you can perform a reset. Your settings will not be changed. To perform the reset, click on the "Reset" button below. You will be asked to confirm your decision. The reset will be complete when the power light stops blinking.
Reset
HELP

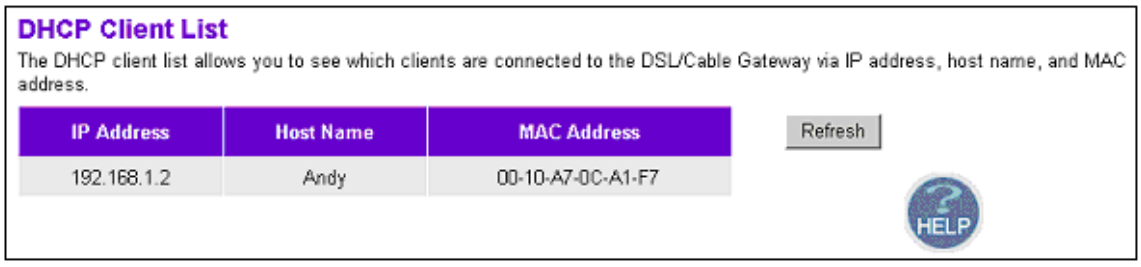
If your Gateway is not operating correctly, you can choose this option to display the Reset System button. You can perform a reset of the Gateway; your settings will not be changed. By clicking the reset button you'll be asked to confirm your decision, once the power light stops blinking the reset is completed.

## LAN Settings



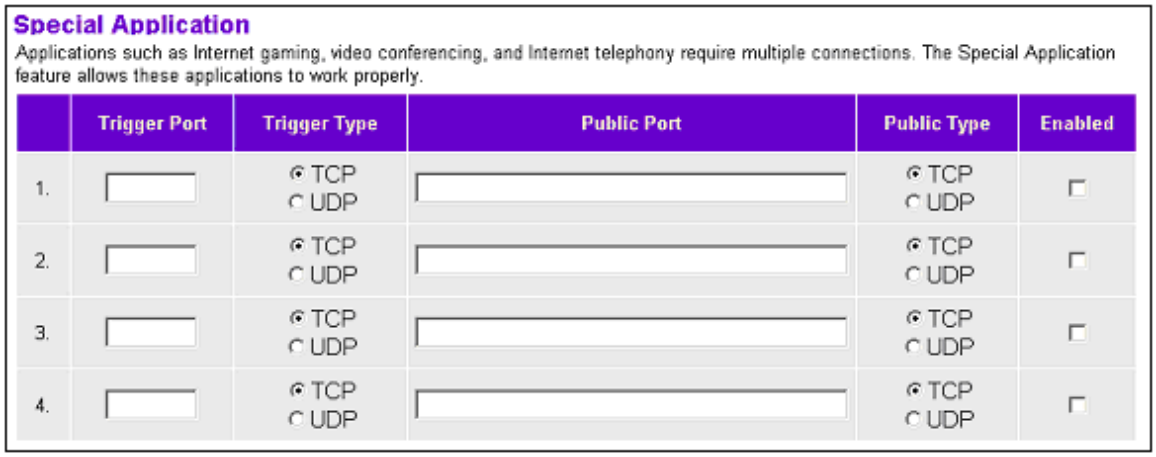

The Gateway has a function call DHCP, which will assign client computer IP addresses. To assign IP address for clients, users will need to enable the DHCP server, set the lease time, and specify the address range. In the user's PC settings remember to configure them for dynamic address allocation.

## DHCP Client List



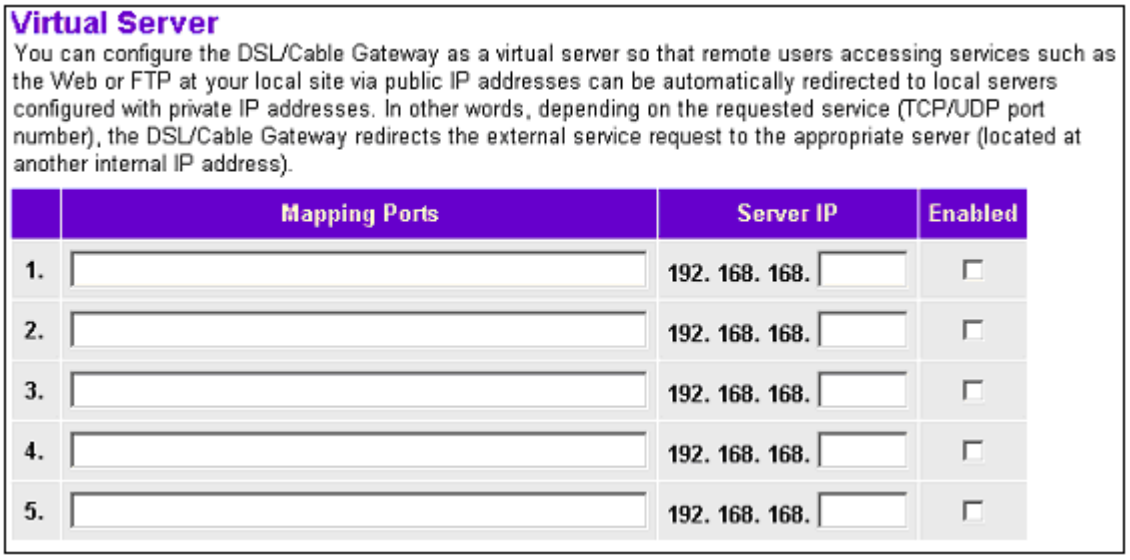

DHCP Client List allows administrator to see which clients are connected to the Gateway via DHCP.

## Special Application


Special Application
Applications such as Internet gaming, video conferencing, and Internet telephony require multiple connections. The Special Application feature allows these applications to work properly.
Trigger Port
Trigger Type
Public Port
Public Type
Enabled
1. TCP UDP TCP UDP
2. TCP UDP TCP UDP
3. TCP UDP TCP UDP
4. TCP UDP TCP UDP

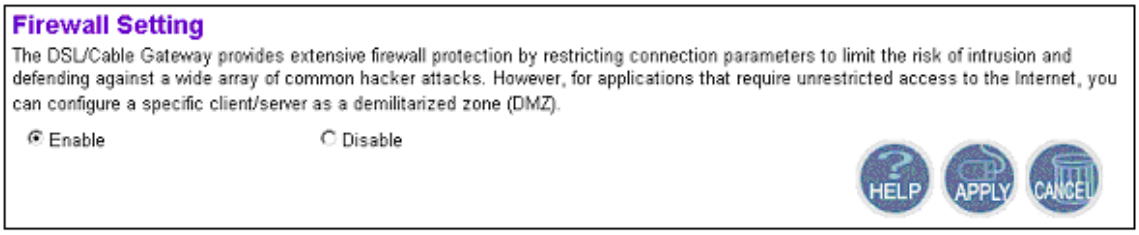
Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. If you need to run applications that require specific port which is associated with an application users can input port number in the "Trigger Port" field, select the protocol type, then enter the public ports associated with the trigger port to open them for inbound traffic.

## Virtual Server


Virtual Server
You can configure the DSL/Cable Gateway as a virtual server so that remote users accessing services such as the Web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP addresses. In other words, depending on the requested service (TCP/UDP port number), the DSL/Cable Gateway redirects the external service request to the appropriate server (located at another internal IP address).
Mapping Ports
Server IP
Enabled
1. 192. 168. 168.
2. 192. 168. 168.
3. 192. 168. 168.
4. 192. 168. 168.
5. 192. 168. 168.

If you configure the DSL/Cable Gateway as a virtual server, remote users accessing services such as Web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP address. In other words, depending on the requested service (TCP/UDP port number), the DSL/Cable Gateway redirects the external service request to the appropriate server.

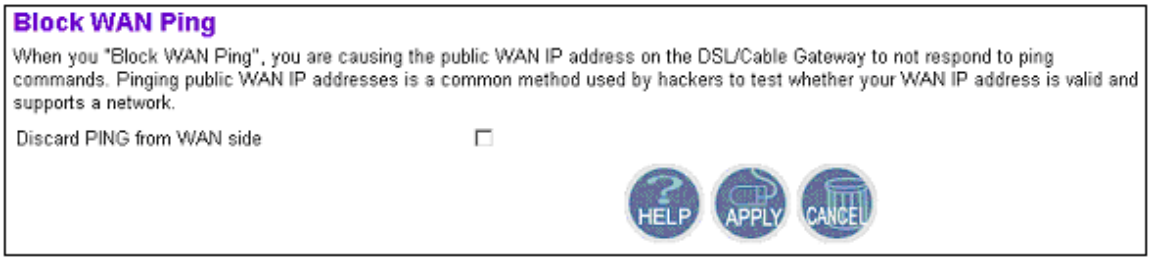
## Firewall Setting


Firewall Setting
The DSL/Cable Gateway provides extensive firewall protection by restricting connection parameters to limit the risk of intrusion and defending against a wide array of common hacker attacks. However, for applications that require unrestricted access to the Internet, you can configure a specific client/server as a demilitarized zone (DMZ).
Enable
Disable
HELP
APPLY
CANCEL

The DSL/Cable Gateway provides extensive firewall protection by restricting connection parameters to limit the risk of intrusion and defending against a wide array of common hacker attacks. However, for applications that require unrestricted access to the Internet, you can configure a specific client/server as a demilitarized zone (DMZ).

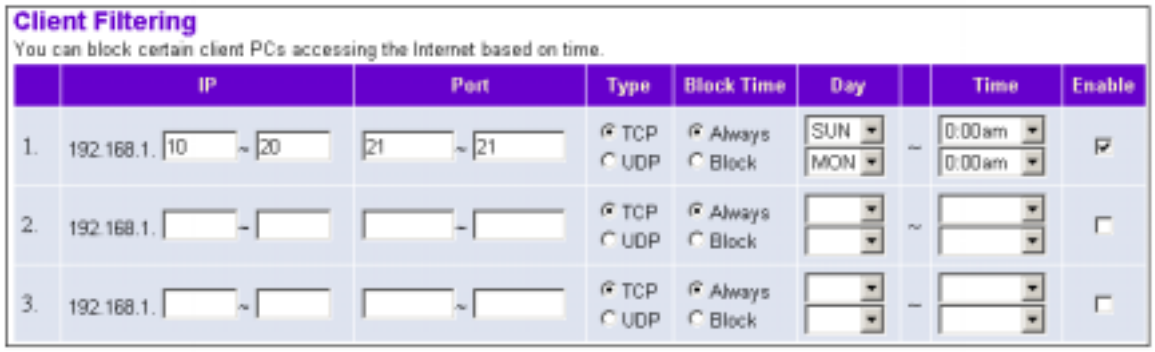
**Note:** Packet filtering is a sophisticated feature that can substantially impact your DSL/Cable Gateway operations, therefore be sure that you fully understand the description in this chapter before you start to configure and use this feature, since if you make any mistakes, it may produce drastic and potentially undesired results.

## Block WAN Ping


Block WAN Ping
When you "Block WAN Ping", you are causing the public WAN IP address on the DSL/Cable Gateway to not respond to ping commands. Pinging public WAN IP addresses is a common method used by hackers to test whether your WAN IP address is valid and supports a network.
Discard PING from WAN side
HELP
APPLY
CANCEL

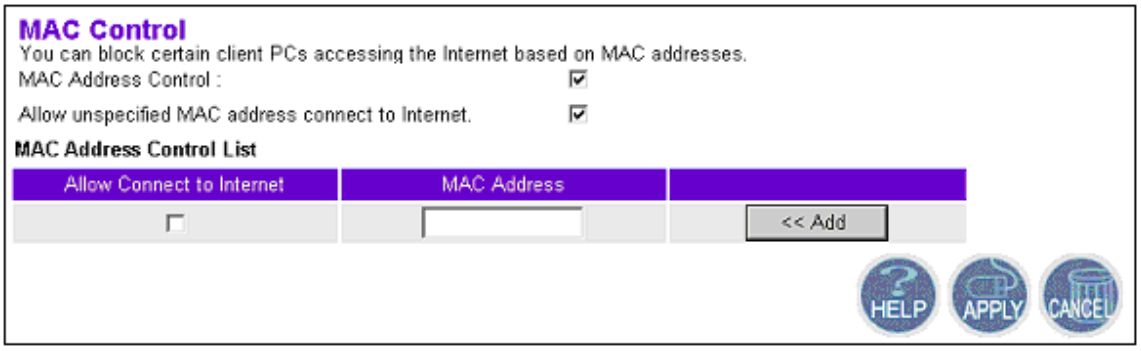
Administrators can block WAN Ping from hacker to test whether your WAN IP address is valid and supports a network.

## Client Filtering


Client Filtering
You can block certain client PCs accessing the Internet based on time.
IP
Port
Type
Block Time
Day
Time
Enable
1. 192.168.1. 10 ~ 20 21 ~ 21 TCP UDP Always Block SUN MON 0:00am 0:00am
2. 192.168.1. TCP UDP Always Block
3. 192.168.1. TCP UDP Always Block

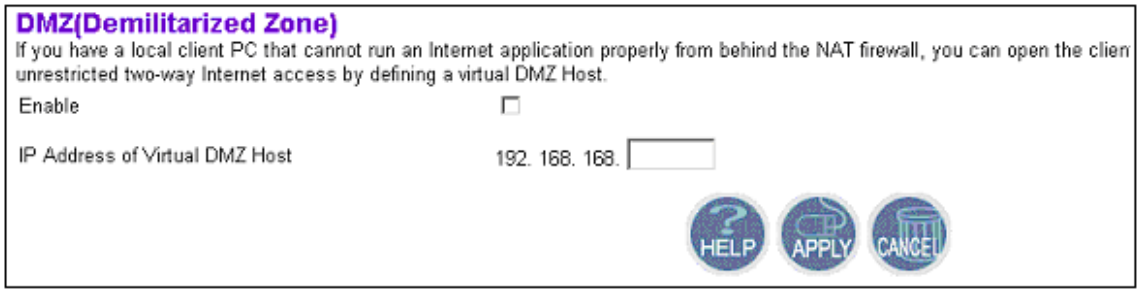
You can filter Internet access for local clients based on IP addresses, application types, (i.e., TCP or UDP port), and time of day. For example, this screen shows that clients in the address range 192.168.1.10-20 are permanently restricted from using TCP (Port 21).

## MAC Control



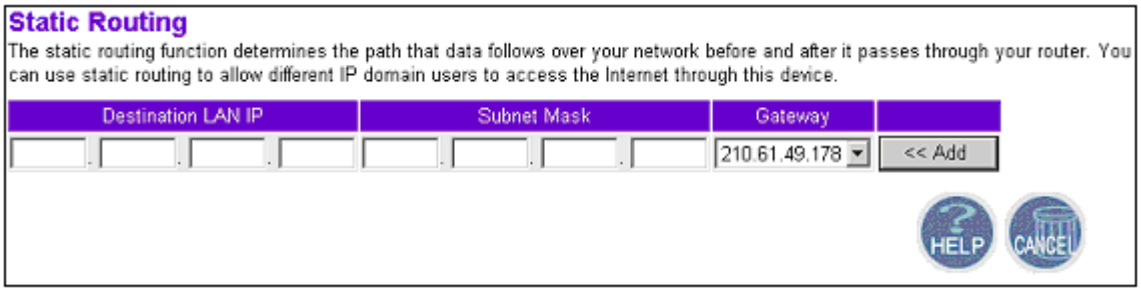

You can block certain client PCs accessing the Internet based on MAC addresses.

## DMZ (Demilitarized Zone)


DMZ(Demilitarized Zone)
If you have a local client PC that cannot run an Internet application properly from behind the NAT firewall, you can open the clien
unrestricted two-way Internet access by defining a virtual DMZ Host.
Enable
IP Address of Virtual DMZ Host
192. 168. 168.
HELP
APPLY
CANCEL

If you have a client PC that tries to run Internet application from out side of firewall, after configuring the Special Applications function or Virtual Server and still won't work, then you can open the client up to unrestricted two-way Internet access. Enter the IP address of a DMZ host to this screen. Adding a client to the DMZ (Demilitarized Zone) may expose your local network to a variety of security risks; so only use this option as a last resort.

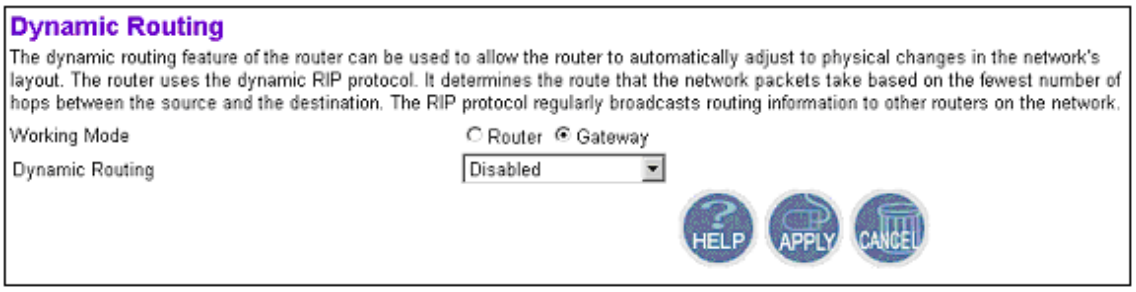
## Static Routing


Static Routing
The static routing function determines the path that data follows over your network before and after it passes through your router. You
can use static routing to allow different IP domain users to access the Internet through this device.
Destination LAN IP
Subnet Mask
Gateway
210.61.49.178
<< Add
HELP
CANCEL

**Add Default Route:** select if you want to specify a new default route. Note that the Remote IP Address and Remote IP net mask fields do not appear if you select this option.

**Note:** Normally home users don't need to add static route to their Gateway. Adding the wrong default route may result in abnormal system behavior.

## Dynamic Routing

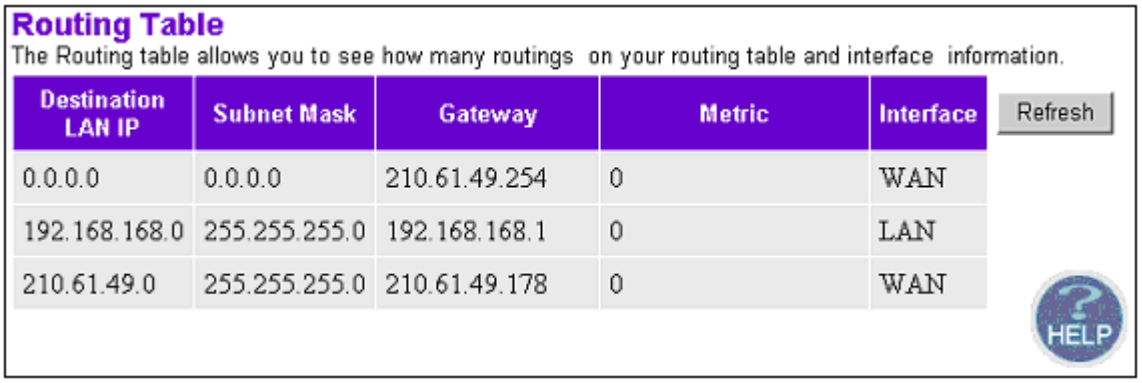

Dynamic Routing
The dynamic routing feature of the router can be used to allow the router to automatically adjust to physical changes in the network's layout. The router uses the dynamic RIP protocol. It determines the route that the network packets take based on the fewest number of hops between the source and the destination. The RIP protocol regularly broadcasts routing information to other routers on the network.
Working Mode
Router
Gateway
Dynamic Routing
Disabled
HELP
APPLY
CANCEL

The dynamic routing feature of the router can be used to allow the router to automatically adjust to physical changes in the network's layout. The router uses the dynamic RIP protocol. It determines the route that the network packets take based on the fewest number of hops between the source and the destination. The RIP protocol regularly broadcasts routing information to other routers on the network.

When choose router it'll exchange routing table information with other routers, when choose gateway it'll automatically disabled exchange of routing information.
When Choose Disabled mode it'll disable the broadcasting of routing table.
RIP (Routing Information Protocol) is a protocol used to exchange information with other routers.

**Note:** Normally home users don't need to enable any dynamic routing protocol.

## Routing Table List




The IP routing table contains all the information that the DSL/Cable Gateway needs to route an IP data packet. You can view the IP routing table by clicking on the IP Routing Table button at the bottom of the System IP Configuration form. From this form, you can also manually add new routing entries to the table.

# Appendix A Troubleshooting

This section describes common problems you may encounter during setup of the DSL/Cable Gateway. If you cannot resolve any connection problems after checking the following solutions, please contact our tech support at support@unex-tech.com

## Troubleshooting

**Power Adapter**
-Check connections between gateway and external power supply, or the wall outlet
-If the power indicator does not turn on when the power outlet, power cord, or external power supply
-If unit powers off after running for a period of time, check for loose power connections, power losses or surges at the power outlet.
-If problem still persistent please contact our technical support for assistance.

**Router LED**
-Verify that the router and the device attached is on
-Make sure the cable is seated properly and that the correct cable type is used
-Make sure that the NIC is configure for the proper communication speed
-Check the adapter on the attached device and cable connections for possible defects.

**Network Connection**
-Verify that the IP address are properly configured. Use the router's DHCP function to dynamically assign IP addresses to any host on the attached LAN. Please verify that you're on the same sub-network if you manually configure your IP.

**Management Problems**
**-**Make sure that you have configured the router with a valid IP address, subnet mask and default gateway.
-Check that you have a valid network connection tot the broadband gateway by pinging the router's IP.
-Check the network cabling between the management station and the router

# Appendix B Specifications

| Unex NexIP – IS050s Cable/DSL Gateway | |
|---|---|
| **Specifications** | **NexIP IS050s** |
| Standards | IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3x flow control |
| Ports | LAN:4 10BASE-T/100BASE-TX auto-negotiation switch |
| | WAN: 1 10BASE-T/100BASE-TX port |
| Protocols supported | TCP, IP, NAT, UDP, PPPoE, PPTP, DHCP (client and server), CSMA/CD, IP routing, NAT/PAT |
| WAN type supported | Static IP address, Dynamic IP address (DHCP), PPP over Ethernet, PPTP |
| Management | Embedded /Web server for remote management |
| | Firmware upgrade via Web-based GUI |
| | Configuration data upload and download via TFTP |
| | Internet access time restriction feature |
| | DHCP server/client supported |
| | Multiple connection profile |
| Monitoring | Runtime traffic monitoring |
| | System Log |
| Security | NAT firewall |
| | IP Packet filtering (IP address/Protocol/Port number) |
| | PPP PAP/CHAP/MS-CHAP authentication |
| VPN | L2TP pass through |
| | PPTP pass through, client |
| | IPSec pass through |
| LED | Power |
| | EWAN:10/100, LNK/ACT,FDX/COL |
| | LAN: 10/100, LNK/ACT,FDX/COL |
| System requirements | Windows 95, 98, Me, 2000, XP, NT, Linux, Unix, or Apple Mac |
| | A 10BASE-T or 100BASE-TX Ethernet adapter and Ethernet cable for each computer |
| | An external DSL or Cable modem with an Ethernet RJ45 interface and a working Internet account |
| Output of power adapter | 7.5VDC |
| Package weight | 1.44Kg |
| Package dimension | 362 x 267 x 91 mm |
| Operating temperature | 0℃~55℃ (32℉~131℉) |
| Storage temperature | -20℃~70℃ (-4℉~158℉) |

| | |
|---|---|
| **Humidity** | **5%~95% (non-condensing)** |
| **Compliance** | **CE, C-Tick, FCC Class B, UL, cUL, CISPR 22 Class B** |

**Ordering Information:**
IS050s: DSL/Cable Gateway. 10/100 Mbps Ethernet WAN port for sharing
Internet access via DSL/Cable connection and 4 x 10/100Mbps switch port for wired Ethernet connection.

**Customer Support**
Product support and update information is available via Unex's web site http://www.unex-tech.com

**Package Contents:**
* Unex DSL/Cable Gateway
* Power adapter
* CD with user's manual
* Multi-language Quick Start Guide